

Via Facsimile, May 27, 2005
Commissioner for Patents
App. No. 09/760,063
Page 2 of 14

IN THE SPECIFICATION

Delete Appendix 2.

Delete the paragraph beginning on line 20 of page 8 and ending at line 1 of page 9.

Replace the paragraph on page 31, lines 10-12, with the following paragraph:

The Vera language is a product of Synopsys, Inc., of Mountain View, California. ~~A comprehensive explanation of the Vera language and its capabilities is presented in the Vera User's Manual incorporated herein as Appendix 2.~~

Replace the paragraph beginning on page 37, line 19, and ending on page 38, line 16, with the following paragraph:

Optional biasing considerations set by the user and/or by the environmental model are considered at 311, and appropriate action is taken. Biasing of input may be accomplished in at least two ways. The first is through the use of the "UserBiasDrive" function. A totally random input for any particular bit of an input vector would have a value of "1" in 50% of cases and a value of "0" in the remainder. The user may change this ratio, or bias the input, by using standard Vera language techniques within the "UserBiasDrive" function, ~~as described in the Vera language manual of Appendix 2.~~ In addition, CoverBooster provides a "dynamic" biasing mechanism. When a trace for driving the DUT model into goal state is provided from a formal engine, the "biasWeightsFlag" is set in the random simulator, prior to driving the DUT model through the trace. This causes CoverBooster to count, for each input signal, how many times the signal "1" or "0" is encountered as the trace is applied. These counts, or "weights", may then be used, through application of other standard Vera language techniques, to bias the inputs so that something other than a 50%-50% ratio of "1"s and "0"s results. These "dynamically biased" inputs are used in the first few (e.g., 1000) input patterns generated following the reaching of a goal state. Periodically these weights are cleared, as at 311, since their effectiveness decreases as the number of test cycles increases.